

REMARKS/ARGUMENTS

1.) **Claim Rejections – 35 U.S.C. § 103(a)**

Claims 16, 19-21, 24, 26, 28-32, 34, 36-40 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Bergstrom et al. (US 6,131,013) in view of Heinonen et al. (US 6,363,127) and O'Byrne (US 6,243,584). Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bergstrom et al. in view of Heinonen et al. and Smith et al. (US 5,809,017), and further in view of O'Byrne. Applicants gratefully acknowledge Examiner's acceptance of our arguments made in the previously filed Response and Applicants further traverse the present rejection. As noted in our prior Response, the present invention teaches and claims an interference classifier that classifies types of interference as being either intra-cell and inter-cell. According to the Examiner, Bergstrom, at col. 3, lines 39-51 and col. 6, line 56-col. 7 line 35 teaches classifying interference as one of 2 types. Actually, Bergstrom teaches an interference classifier, but does not distinguish between intra-cell and inter-cell interference. Because of this failure of Bergstrom, the Examiner cites O'Byrne, at Fig. 1, and col. 2, lines 27-33, for being able to distinguish between intra-cell and inter-cell interference. O'Byrne discloses a system that increases the capacity of a CDMA network having a plurality of cell sites. The system of O'Byrne is said to define a pool of frequencies available for assignment, and assign one of the available frequencies to each of the cell sites so as to minimize the number of neighboring cell sites assigned a same one of the available frequencies. According to O'Byrne, by deploying different frequencies in the cell sites, the amount of interference caused by neighboring cell sites is reduced and as a result, the capacity of each of the cell sites operating at a single frequency can be increased, so long as there remains sufficient power to reach the mobile units operating within the cell site. O'Byrne states that its system is able to attain maximum benefits when the cell sites are located close together and the propagation exponent is low (for example, 10-20 dB/decade).

Figure 1 of O'Byrne shows a graph of the frequency reuse factor as a function of the path-loss exponent obtained by considering a hexagonal arrangement of cell sites in a CDMA network deployed at a single frequency. This Figure is not directed toward

distinguishing between intra-cell and inter-cell interference. Further, the passage cited by the Examiner as disclosing *an interference classifier that classifies types of interference as being either intra-cell and inter-cell* provides:

Intracell interference represents interference caused by mobile units operating within the cell site, and intercell interference represents interference caused by mobile units operating within other cell sites. Intercell interference detracts from the usable capacity of the network, and must be reduced to increase the frequency reuse factor to its theoretical maximum of unity.

As is clear from this passage, all O'Byrne does is describe the problem. It does not describe, disclose nor suggest any mechanism by which these different types of interference can be identified using an interference classifier. Since there is no description of any mechanism by which the interference is classified, O'Byrne fails to supply the element of *an interference classifier that classifies types of interference as being either intra-cell and inter-cell*. Further, none of Bergstrom, Heinonen, nor Smith disclose nor suggest this element.

CONCLUSION

In view of the foregoing remarks, the Applicants believe all of the claims currently pending in the Application to be in a condition for allowance. The Applicants, therefore, respectfully request that the Examiner withdraw all rejections and issue a Notice of Allowance for claims 16, 19-21, 24, 26, 28-32, 34-40. The Applicants request a telephonic interview if the Examiner has any questions or requires any additional information that would further or expedite the prosecution of the Application.

Respectfully submitted.



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